WE CLAIM:

1.   A method to perform an add operation from a root to a leaf, comprising the steps of:

identifying a root;

identifying any unused leaf; and

traversing from the root to the any unused leaf.

2.   The method of Claim 1, wherein the data structure comprises a heap.

3.   The method of Claim 1, wherein the traversing step comprises the step of percolating values within the heap.

4.   The method of Claim 1, wherein the traversing step comprises the step of not percolating the leaf to the root.

5.   A method for performing a remove operation in a data structure, comprising the steps of:

removing a value from a root that leaves a hole; and

percolating the hole to a leaf position.

6.   The method of Claim 5, wherein in the percolating step, comprising the step of percolating the hole to any arbitrary leaf position in the data structure.

7.   The method of Claim 5, wherein the data structure comprises a tree-like structure.

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